ABSTRACT OF THE DISCLOSURE

A diode wheel has a two-piece structure including a hub and spoke assembly (spoke assembly) and a drum. The spoke assembly is unitary with spokes projecting radially from a central hub. The drum's inner surface is a circular cylinder. The drum is shrunk-fit onto the outer ends of the spokes carried by the spoke assembly by heating the drum and then cooling the drum after properly positioning the drum on the spoke assembly. The outer end of each spoke is configured as a pad whose outer surface area in contact with the inner drum surface is substantially larger than the minimum cross sectional area of the arm. The pad presses against and supports the inner surface of the drum, and reduces stress concentrations in both the spoke assembly and the drum. In a preferred embodiment, the outer surface of each spoke is a segment of a circular cylinder whose radius of curvature forms an interference fit at room temperature with the inner surface of the drum.